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L5: Entry 24 of 24

File: DWPI

Sep 6, 1983

DERWENT-ACC-NO: 1983-771333

DERWENT-WEEK: 198339

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TITLE: Aq. disinfectant cleaner compsns. - contg. opt. pine oil, alpha-terpineol, surfactant and stabiliser

INVENTOR: DANN, T M; SGARAMELLA, P

PATENT-ASSIGNEE:

ASSIGNEE

CODE

AMERICAN CYANAMID CO

AMCY

PRIORITY-DATA: 1981US-0235251 (February 17, 1981)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

CA 1153267 A

September 6, 1983

N/A

010

N/A

INT-CL (IPC): C11D 3/48

ABSTRACTED-PUB-NO: CA 1153267A

BASIC-ABSTRACT:

Disinfectant cleaner compsn. contains (by wt.): (a) 0-8% pine oil (I); (b) alpha-terpineol (II) (to total (II)-content at least 5.6%), (c) 5-12% nonionic or anionic surfactant (III); (d) 6-12% stabiliser (IV); and (e) H2O. The stable compsns. have good consumer appeal, and although they contain only low levels of pine oil, they have excellent bactericidal properties against Gram-negative organisms.

Pref. compsns. have pH 9-11 (9.5-10.5) and contain (by wt.): 3-7% (I), 6-8% (III), and 8-10% (IV), and opt. also 0.05-2 (0.5-1)% EDTA (or deriv.).

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: AQUEOUS DISINFECT CLEAN COMPOSITION CONTAIN OPTION PINE OIL ALPHA TERPINEOL SURFACTANT STABILISED

DERWENT-CLASS: D25 E19

CPI-CODES: D11-A01A; D11-A03; D11-B11; D11-B12; D11-B14; D11-D01; E10-E04H; E10-E04L; E10-E04M;

CHEMICAL-CODES:

Chemical Indexing M3 *01*

Fragmentation Code

G035 G562 H4 H401 H481 H8 M210 M211 M240 M281

M313 M321 M331 M340 M342 M373 M391 M415 M510 M520

M530 M541 M781 M903 M910 P220 Q261 R023

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| Terms | Documents |
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| 14 and 15 | 8 |

Database:

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 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Refine Search:

14 and 15

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| <u>DB Name</u> | <u>Query</u> | <u>Hit Count</u> | <u>Set Name</u> |
|-------------------------------|--|------------------|-----------------|
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | 14 and 15 | 8 | <u>L6</u> |
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | (504/142 OR 514/558 OR 514/729).CCLS. | 904 | <u>L5</u> |
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | 11 and 13 | 1204 | <u>L4</u> |
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | fatty near6 (soap\$1 or salt\$1) | 49618 | <u>L3</u> |
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | fatty near6 (soap\$1 or ester\$1) | 90064 | <u>L2</u> |
| USPT,PGPB,JPAB,EPAB,DWPI,TDBD | monoterpene\$1 or (pine oil) or pinene\$1 or terpineol\$1 or borneol\$1 or isoborneol\$1 or citronellol or liminol | 13716 | <u>L1</u> |

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Search Results - Record(s) 1 through 8 of 8 returned.☒ 1. Document ID: US 6069169 A

L6: Entry 1 of 8

File: USPT

May 30, 2000

US-PAT-NO: 6069169

DOCUMENT-IDENTIFIER: US 6069169 A

TITLE: OXA acids and related compounds for treating skin conditions

DATE-ISSUED: May 30, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|----------------------|------------|-------|----------|---------|
| Ptchelintsev; Dmitri | Mahwah | NJ | N/A | N/A |
| Scancarella; Neil | Wyckoff | NJ | N/A | N/A |
| Kalafsky; Robert | Ogdensburg | NJ | N/A | N/A |

US-CL-CURRENT: 514/532; 424/70.1, 514/546, 514/549, 514/550, 514/558, 514/559, 514/560, 514/568

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 2. Document ID: US 5847003 A

L6: Entry 2 of 8

File: USPT

Dec 8, 1998

US-PAT-NO: 5847003

DOCUMENT-IDENTIFIER: US 5847003 A

TITLE: Oxa acids and related compounds for treating skin conditions

DATE-ISSUED: December 8, 1998

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|----------------------|------------|-------|----------|---------|
| Ptchelintsev; Dmitri | Mahwah | NJ | N/A | N/A |
| Scancarella; Neil | Wyckoff | NJ | N/A | N/A |
| Kalafsky; Robert | Ogdensburg | NJ | N/A | N/A |

US-CL-CURRENT: 514/532; 514/546, 514/549, 514/558, 514/559, 514/560

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 3. Document ID: US 5763468 A

L6: Entry 3 of 8

File: USPT

Jun 9, 1998

US-PAT-NO: 5763468
DOCUMENT-IDENTIFIER: US 5763468 A

TITLE: Disinfectant or antiseptic composition comprising at least one terpene alcohol and at least one bactericidal acidic surfactant, and use of such a mixture

DATE-ISSUED: June 9, 1998

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Barranx; Alain | Oeyreluy | N/A | N/A | FRX |
| Barsacq; Michel | Dax | N/A | N/A | FRX |
| Dufau; Ghislain | Dax | N/A | N/A | FRX |
| Lauilhe; Jean-Paul | Dax | N/A | N/A | FRX |

US-CL-CURRENT: 510/383; 510/382, 514/129, 514/557, 514/558, 514/559, 514/560, 514/568

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 4. Document ID: US 5342630 A

L6: Entry 4 of 8

File: USPT

Aug 30, 1994

US-PAT-NO: 5342630

DOCUMENT-IDENTIFIER: US 5342630 A

TITLE: Environmentally safe pesticide compositions

DATE-ISSUED: August 30, 1994

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-----------------|---------|-------|----------|---------|
| Jones; Keith A. | Yardley | PA | N/A | N/A |

US-CL-CURRENT: 424/717; 424/686, 424/687, 424/715, 424/716, 504/142, 504/320, 504/362, 514/558, 514/560, 514/738

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 5. Document ID: US 5098468 A

L6: Entry 5 of 8

File: USPT

Mar 24, 1992

US-PAT-NO: 5098468

DOCUMENT-IDENTIFIER: US 5098468 A

TITLE: Fatty acid based emulsifiable concentrate having herbicidal activity

DATE-ISSUED: March 24, 1992

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|---------------|-------|----------|---------|
| Puritch; George S. | Saanichton | N/A | N/A | CAX |
| Bradbury; Roderick | Sidney | N/A | N/A | CAX |
| Mason; Wenda | Brentwood Bay | N/A | N/A | CAX |

US-CL-CURRENT: 504/142; 504/363

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 6. Document ID: US 5035741 A

L6: Entry 6 of 8

File: USPT

Jul 30, 1991

US-PAT-NO: 5035741

DOCUMENT-IDENTIFIER: US 5035741 A

TITLE: Fatty acid based emulsifiable concentrate having herbicidal activity

DATE-ISSUED: July 30, 1991

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|---------------|-------|----------|---------|
| Puritch; George S. | Saanichton | N/A | N/A | CAX |
| Bradbury; Roderick | Sidney | N/A | N/A | CAX |
| Mason; Wenda | Brentwood Bay | N/A | N/A | CAX |

US-CL-CURRENT: 504/142; 504/320, 504/363

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 7. Document ID: US 4198227 A

L6: Entry 7 of 8

File: USPT

Apr 15, 1980

US-PAT-NO: 4198227

DOCUMENT-IDENTIFIER: US 4198227 A

TITLE: Synergistic herbicidal compositions

DATE-ISSUED: April 15, 1980

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|----------|-------|----------|---------|
| Kollman; Gerald E. | Chalfont | PA | N/A | N/A |
| Irwin; Elwood N. | Media | PA | N/A | N/A |

US-CL-CURRENT: 504/142; 504/149

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 8. Document ID: US 4058628 A

L6: Entry 8 of 8

File: USPT

Nov 15, 1977

US-PAT-NO: 4058628

DOCUMENT-IDENTIFIER: US 4058628 A

TITLE: Disinfectant composition comprising pinanol

DATE-ISSUED: November 15, 1977

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-----------------|--------------|-------|----------|---------|
| Mitch; Frank A. | Jacksonville | FL | N/A | N/A |

US-CL-CURRENT: 514/729; 514/784

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
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L6: Entry 1 of 8

File: USPT

May 30, 2000

DOCUMENT-IDENTIFIER: US 6069169 A

TITLE: OXA acids and related compounds for treating skin conditions

BSPR:

From about 0.1 wt. % to about 90 wt. %, preferably from about 1 wt. % to about 50 wt. %, and most preferably about 5 wt. % to about 20 wt. % of the oxa acids can also be used in compositions that contain insect repellents such as, aliphatic, cyclic or aromatic amides, citronella oil, terpineol, cineole, neem oil and terephthalic acid and its esters. Other suitable insect repellents can be found in Technical Bulletin No. 1549 from the U.S. Department of Agriculture or in their Agricultural Handbook Nos. 69, 340 and 461.

CLPV:

about 0.1 wt. % to about 30 wt. % of an emulsifier, wherein said emulsifier is selected from the group consisting of sorbitans, alkoxylated fatty alcohols, alkylpolyglycosides, soaps, alkyl sulfates, monoalkyl and dialkyl phosphates, alkyl sulphonates, and acyl isothionates.

CCXR:

514/558

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L6: Entry 3 of 8

File: USPT

Jun 9, 1998

DOCUMENT-IDENTIFIER: US 5763468 A

TITLE: Disinfectant or antiseptic composition comprising at least one terpene alcohol and at least one bactericidal acidic surfactant, and use of such a mixture

BSPR:

The present invention relates to the bactericidal properties of terpene alcohols, in particular those present in essential oils or pine oil.

BSPR:

Pine oils consist of mixtures of terpene hydrocarbons and alcohols. In these mixtures, the proportions of terpene hydrocarbons and alcohols may be in a ratio of from 20/80 to 95/5, preferably 50/50 to 95/5. The terpene alcohols are essentially composed of monocyclic terpene alcohols (terpineols, terpin-1-en-4-ol, etc.) and, in lower proportion, tricyclic terpene alcohols (fenchol, borneol, etc.).

BSPR:

Pine oil is known and used for its bactericidal properties in disinfectant compositions, in cleansing and disinfectant compositions and in antiseptic compositions. However, the bactericidal activity of such compositions is limited to gram-negative bacteria.

BSPR:

The reason for this is that terpene alcohols, in particular those of pine oil, in solution, in microemulsion or in aqueous dispersion, are not effective on gram-positive microorganisms, at the very least not in the forms currently available.

BSPR:

In order to obtain a disinfectant or antiseptic which has a broad spectrum of antibacterial efficacy, one or more compounds having bactericidal activity against gram-positive microorganisms thus have to be used in combination with the pine oil.

BSPR:

The composition according to the invention may advantageously comprise (i) a mixture of terpene alcohols containing, in particular, 30 to 100% by weight of monocyclic terpene alcohols, preferably 80 to 95%. It may in particular comprise a mixture containing 70 to 100% by weight of terpineols, preferably 80 to 90%.

BSPR:

In this case, pine oil may be used as mixture (i). The latter may be of natural or synthetic origin, obtained, for example, by catalytic hydration of .alpha.-pinene.

BSPR:

A particularly preferred composition comprises (i) 5 to 20% by weight of at least one of the said terpene compounds, in particular pine oil, (ii) 5 to 20% by weight of bactericidal acidic surfactant(s), water representing the remainder.

BSPR:

An unexpected synergy effect is in particular observed between pine oil and the surfactants of polyether carboxylic acid type or of phosphoric ester of alkoxyated nonionic surfactant type. Indeed, the effective dose of a composition according to the invention containing a combination of the said ingredients is

substantially less than the sum of the amounts of each active material, calculated on the basis of the efficacy of each active material taken individually, which are required in order to achieve the same result.

DEPR:

A cleansing solution is prepared from pine oil and lauryl polyoxyethylene carboxylic acid in accordance with the invention.

DEPR:

The pine oil used is a product marketed under the brand name Dertol.RTM. 90 by the company Les Derives Resiniques et Terpeniques, which comprises a mixture of terpenic alcohols and terpenic hydrocarbons whose terpenic alcohol content is between 88 and 93%.

DEPR:

In each case, the amount of bactericidal active agent corresponding to this dilution is given in the table. For the tests on gram-negative bacteria, the amount of bactericidal active agent corresponds to the total amount of pine oil and of surfactant (which each have an activity against bacteria of this type). For the tests on gram-positive bacteria, only the surfactant is taken into account as bactericidal active agent, the pine oil alone having no activity against bacteria of this type.

DEPR:

A composition containing no pine oil, but which contains the same amount of bactericidal acidic surfactant (lauryl polyoxyethylene carboxylic acid) as the composition of Example 1, is prepared and subjected to the AFNOR test NFT 72-151 as in Example 1.

DEPR:

A composition containing no bactericidal acidic surfactant, but which contains the same amount of pine oil as the composition of Example 1, is prepared and subjected to the AFNOR test NFT 72-151 as in Example 1.

DEPR:

A surfactant is, however, needed to prepare the emulsion. A tall-oil sodium fatty acid soap which has no bactericidal properties is used.

DEPR:

The comparative examples demonstrate the synergistic effect between pine oil and the surfactant.

DEPR:

Thus, the addition of pine oil, which is inactive against gram-positive bacteria, to the surfactant, makes it possible to reduce by a factor of 8 the dose of bactericidal surfactant required for bactericidal activity against the gram-positive microorganisms.

DEPR:

Moreover, if the bactericidal properties of pine oil and the surfactant were simply additive, a mixture of 20% of each of them, according to Examples 1a and 1b, would not be effective on gram-negative bacteria at a dose of less than 6000 ppm of total bactericidal active agent. On the contrary, the composition of Example 1 remains effective down to a dose of 2000 ppm of total bactericidal active agent.

DEPR:

A disinfectant cleansing composition is prepared from pine oil (Dertol.RTM. 90) and the mixture of phosphoric mono- and diester of ethoxylated nonylphenol, Rhodafac.RTM. RE-610.

DEPR:

A composition containing no pine oil, but which contains the same amount of bactericidal acidic surfactant as the composition of Example 4, is prepared and subjected to the AFNOR test NFT 72-151 as in Example 4.

DEPR:

The comparative examples demonstrate the synergistic effect between pine oil and the surfactant.

DEPR:

Thus, if the bactericidal properties of pine oil and the surfactant were simply additive, a mixture of 20% of each of them, according to Examples 4a and 1b, would not be effective on gram-negative bacteria at a dose of less than 3000 ppm of total bactericidal active agent. On the contrary, the composition of Example 4 remains effective down to a dose of 1600 ppm of total bactericidal active agent.

DEPU:

Pine oil 20%

DEPU:

Pine oil 20%

DEPU:

Tall-oil sodium fatty acid soap 20%

DEPU:

Pine oil 5%

DEPU:

Pine oil 20%

CLPR:

5. A composition according to claim 1, further comprising at least one terpene hydrocarbon provided by pine oil.

CLPV:

(i) 5 to 20% by weight of a mixture of terpene alcohols and terpene hydrocarbons provided by pine oil,

CCXR:

514/558

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L6: Entry 4 of 8

File: USPT

Aug 30, 1994

DOCUMENT-IDENTIFIER: US 5342630 A

TITLE: Environmentally safe pesticide compositions

BSPR:

Of particular interest with respect to the present invention are agrochemical compositions which include an environmentally safe pesticidal ingredient such as a fatty acid salt. SAFER Insecticidal Soap is an available commercial product which includes an alkali metal fatty acid salt as an active pesticidal ingredient. This type of pesticidal soap product in the form of an aqueous formulation is described in publications such as U.S. Pat. No. 5,093,124.

BSPR:

One or more objects of the present invention are accomplished by the provision of a pesticide composition which is a dry blend formulation comprising (1) an inorganic salt ingredient selected from alkali metal and ammonium bicarbonates, and (2) an ingredient selected from C.sub.8 -C.sub.22 fatty acids and alkali metal and ammonium salts thereof; wherein the composition exhibits fungicidal and insecticidal activities.

BSPR:

The C.sub.8 -C.sub.22 fatty acid ingredient and alkali metal and ammonium salts thereof are selected from natural straight chain and synthetic branched chain fatty acids, which have a saturated or unsaturated structure.

BSPR:

A C.sub.8 -C.sub.22 fatty acid salt of an invention composition is prepared by reacting the free fatty acid component with an appropriate basic alkali metal or ammonium compound, such as a carbonate, bicarbonate or hydroxide derivative.

BSPR:

A C.sub.8 -C.sub.22 fatty acid salt ingredient can be added to an invention composition as a previously prepared compound, or the salt can be formed in situ by the incorporation and blending of C.sub.8 -C.sub.22 fatty acid and basic alkali metal or ammonium bicarbonate ingredients.

BSPR:

In another embodiment this invention provides an aqueous pesticide formulation having an ingredient content which comprises (1) an inorganic salt ingredient selected from alkali metal and ammonium bicarbonates; and (2) a salt ingredient selected from C.sub.8 -C.sub.22 fatty acid alkali metal and ammonium salts; wherein the formulation exhibits fungicidal and insecticidal activities.

BSPR:

The content of C.sub.8 -C.sub.22 fatty acid salt ingredient typically is between about 0.1-30 weight percent, based on the aqueous formulation weight. The content of inorganic salt ingredient is between about 0.05-1.5 parts by weight per part of C.sub.8 -C.sub.22 fatty acid salt ingredient.

BSPR:

An invention aqueous pesticide formulation can be prepared in diluted form for direct usage, with a C.sub.8 -C.sub.22 fatty salt content between about 0.1-5 weight percent. If the aqueous formulation is prepared as a concentrate, the C.sub.8 -C.sub.22 fatty acid salt content can be between about 5-30 weight percent and higher, before dilution with water.

BSPR:

An invention dry blend pesticide composition or aqueous pesticide formulation optionally can contain a compatibility enhancing ingredient, such as a water-soluble organic compound which is in solid form at a temperature below about 10.degree. C., and has a low vapor pressure at ambient temperatures. The content of compatibility enhancing ingredient can vary between about 0.5-20 weight percent, based on the weight of C.sub.8 -C.sub.22 fatty acid and inorganic salt ingredients.

BSPR:

In a further embodiment this invention provides a pet shampoo formulation which is an aqueous medium having an ingredient content which comprises (1) a salt ingredient selected from C.sub.8 -C.sub.22 fatty acid alkali metal and ammonium salts; (2) an inorganic salt ingredient selected from alkali metal and ammonium bicarbonates; and (3) a fragrance ingredient.

BSPR:

The content of C.sub.8 -C.sub.22 fatty acid salt ingredient can vary between about 5-20 weight percent, based on the formulation weight.

BSPR:

Volatile organic compounds suitable as the fragrance ingredient include amyl salicylate, citronellol, citronelloxyacetaldehyde, cyclamen aldehyde, citronellyl isobutyrate, coumarin, cyclohexyl acetate, cyclohexyl butyrate, diethyl malonate, ethyl 2-acetyl-5-ketohexanoate, isobornyl acetate, linalool, phenethyl alcohol, undecanol, alpha-hexylcinnamaldehyde, 2-methylhexanol, hexalon, phenylacetaldehyde, cis-3-hexen-1-ol, cyclamal, veronol, eugenol, Lyrall, Galaxolide, Citralva, musk ambrette, terpinyl acetate, geraniol, alpha-damascone, alpha-methylionone, and the like.

BSPR:

As a further advantage, a present invention aqueous pesticide formulation has improved spreadability and adhesiveness when applied to plant foliage, and resists post-application pesticide drift. An applied formulation also exhibits humectant properties on coated foliage, and increased insecticidal efficacy because of the synergistic combination of inorganic and organic ingredients. The basic pH provided by the inorganic salt ingredient increases the potency of the C.sub.8 -C.sub.22 fatty acid insecticide ingredient, and the rate of insect extermination is accelerated.

DEPR:

The emulsion formulation is diluted with water to 3% by weight fatty acid salt ingredient. The diluted formulation is tested as a pesticidal medium against plant foliage infested with aphids, mites or small caterpillars, respectively. The pesticidal medium is 100% effective with each type of insect.

CLPR:

1. An aqueous pesticide formulation having an ingredient content which comprises (1) potassium bicarbonate; (2) a fatty acid salt ingredient comprising oleic acid, stearic acid and palmitic acid potassium salts; and (3) sorbitol compatibility enhancing ingredient; wherein the content of fatty acid salt ingredient is between about 0.1-30 weight percent, based on the formulation weight; the content of potassium bicarbonate is between about 0.05-1.5 parts by weight per part of fatty acid salt ingredient, and the content of sorbitol compatibility enhancing ingredient is between about 0.5-20 weight percent, based on the weight of fatty acid salt ingredient and potassium bicarbonate; and wherein the formulation exhibits effective insecticidal activity when applied to plant foliage having insect infestation.

CLPR:

3. A process for pest control which comprises applying to plant foliage an effective amount of an aqueous pesticide formulation having an ingredient content which comprises (1) potassium bicarbonate; (2) a fatty acid salt ingredient comprising oleic acid, stearic acid and palmitic acid potassium salts; and (3) sorbitol compatibility enhancing ingredient; wherein the content of fatty acid salt ingredient is between about 0.1-30 weight percent, based on the formulation weight; the content of potassium bicarbonate is between about 0.05-1.5 parts by weight per part of fatty acid salt ingredient, and the content of sorbitol compatibility enhancing ingredient is between about 0.5-20 weight percent, based on the weight of fatty acid salt ingredient and potassium bicarbonate.

WEST

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L6: Entry 5 of 8

File: USPT

Mar 24, 1992

DOCUMENT-IDENTIFIER: US 5098468 A

TITLE: Fatty acid based emulsifiable concentrate having herbicidal activity

BSPR:

Recently, salts of fatty acids, primarily sodium or potassium fatty acid salts, have been used commercially as pesticides. Compositions having excellent pesticidal properties which exploit these salts are available commercially from Safer, Inc., under the trademark SAFER INSECTICIDAL SOAP. A herbicidally active composition utilizing partially saponified fatty acids as the active ingredient is sold by Safer, Inc. under the trademark SHARPSHOOTER. These fatty acid salts are effective, naturally occurring pesticides which have no known long term environmental effects. Although such fatty acid salts are effective herbicides, it would be desirable to provide an alternative composition having an unsaponified active ingredient while maintaining the environmental compatibility of the pesticide and reducing the eye and skin irritancy of the product.

BSPR:

The oil component of the herbicidal formulation comprises a mineral oil, a triglyceride or terpenoid-based oils. Preferred mineral oils include natural petroleum distillates comprising medium to long chain paraffinic hydrocarbons. Preferred triglycerides include cottonseed oil, soybean oil, sunflower oil, linseed oil, coconut oil, and other vegetable oils. Preferred terpenoid-based oils include pine oil, eucalyptus oil, cedar oil and the like.

DEPR:

The oil component of the present invention preferably is a terpenoid, a triglyceride, or a mineral oil. The terpenoid-based oils which may be used with this invention include pine oil, eucalyptus oil, orange oil, cedar oil and the like. Useful triglycerides include various vegetable oils such as cottonseed oil, linseed oil, coconut oil, various grades of soybean oil (e.g., crude soybean oil, degummed soybean oil, salad grade soybean oil), sunflower oil, olive oil, grape oil, rapeseed oil and mustard oil. Cottonseed oil is currently the most preferred triglyceride. The mineral oils which may be used with the herbicidal formulation of this invention are refined horticultural oils such as paraffinic, natural petroleum distillates. An example of a preferred mineral oil is commercially available under the trademarks "SUNSPRAY 6E", "SUNSPRAY 6N" and "SUNSPRAY 6E PLUS" from Sun Refining and Marketing Company of Philadelphia, PA. Such a product contains about 99% refined petroleum distillates and about 1% emulsifier.

DETL:

TABLE I Preferred Herbicidal Emulsifiable Concentrate Formulation Components (percent by weight).

| | | | | | |
|-------------------|-------------------|-------------------|-------------------|--------------------|-----|
| Atlox 3409F 2% | Atlox 3404F 2% | Emsorb 6900** | A 40% Fatty Acid* | 55% Cottonseed Oil | 1% |
| Tween 80 2.5% | Atlox 3409F C 40% | Fatty Acid* | 55% Pine Oil | 2.5% | |
| Atlox 3409F 2% | Atlox 3404F 2% | Emsorb 6900 D 80% | Fatty Acid* | 15% Cottonseed Oil | 1% |
| Atlox 3409F 2% | Atlox 3404F 2% | Emsorb 6900 E 20% | Fatty Acid* | 75% Cottonseed Oil | 1% |
| Atlox 3409F 2% | Atlox 3404F 2% | Emsorb 6900** | F 20% Fatty Acid* | 75% Sunoil 6E Plus | |
| Mineral Oil 1% | Atlox 3409F 2% | Atlox 3404E 2% | Emsorb 6900** | G 60% Fatty Acid* | 35% |
| Cottonseed Oil 1% | Atlox 3409F 2% | Atlox 3404F 2% | Emsorb 6900** | | |

*The fatty acid component of Table I comprises a mixture containing about 94% pelargonic acid, 2% capric acid and about 4% caprylic acid. **Tween 80 may be substituted for this emulsifier.

CLPR:

7. The method of claim 3 wherein the oil component is a terpenoid selected from the group consisting of pine oil, eucalyptus oil, orange oil and cedar oil.

the group consisting of pine oil, eucalyptus oil, orange oil and cedar oil.

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504/142

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L6: Entry 6 of 8

File: USPT

Jul 30, 1991

DOCUMENT-IDENTIFIER: US 5035741 A

TITLE: Fatty acid based emulsifiable concentrate having herbicidal activity

BSPR:

Recently, salts of fatty acids, primarily sodium or potassium fatty acid salts, have been used commercially as pesticides. Compositions having excellent pesticidal properties which exploit these salts are available commercially from Safer, Inc., under the trademark SAFER INSECTICIDAL SOAP. A herbicidally active composition utilizing partially saponified fatty acids as the active ingredient is sold by Safer, Inc. under the trademark SHARPSHOOTER. These fatty acid salts are effective, naturally occurring pesticides which have no known long term environmental effects. Although such fatty acid salts are effective herbicides, it would be desirable to provide an alternative composition having an unsaponified active ingredient while maintaining the environmental compatibility of the pesticide and reducing the eye and skin irritancy of the product.

BSPR:

The oil component of the herbicidal formulation comprises a mineral oil, a triglyceride or terpenoid-based oils. Preferred mineral oils include natural petroleum distillates comprising medium to long chain paraffinic hydrocarbons. Preferred triglycerides include cottonseed oil, soybean oil, sunflower oil, linseed oil, coconut oil, and other vegetable oils. Preferred terpenoid-based oils include pine oil, eucalyptus oil, cedar oil and the like.

BSPR:

The oil component of the present invention preferably is a terpenoid, a triglyceride, or a mineral oil. The terpenoid-based oils which may be used with this invention include pine oil, eucalyptus oil, orange oil, cedar oil and the like. Useful triglycerides include various vegetable oils such as cottonseed oil, linseed oil, coconut oil, various grades of soybean oil (e.g., crude soybean oil, degummed soybean oil, salad grade soybean oil), sunflower oil, olive oil, grape oil, rapeseed oil and mustard oil. Cottonseed oil is currently the most preferred triglyceride. The mineral oils which may be used with the herbicidal formulation of this invention are refined horticultural oils such as paraffinic, natural petroleum distillates. An example of a preferred mineral oil is commercially available under the trademarks "SUNSPRAY 6E", "SUNSPRAY 6N" and "SUNSPRAY 6E PLUS" from Sun Refining and Marketing Company of Philadelphia, Pa. Such a product contains about 99% refined petroleum distillates and about 1% emulsifier.

BSTL:

TABLE I Preferred Herbicidal Emulsifiable Concentrate Formulation Components (percent by weight)

| | |
|--|--|
| A 40% Fatty Acid* 55% Cottonseed Oil 1% | |
| Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900** | B 40% Fatty Acid* 55% <u>Pine Oil</u> 2.5% |
| Tween 80 2.5% Atlox 3409F C 40% Fatty Acid* 55% | Sunspray 6E Plus Mineral Oil 1% |
| Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900 D 80% | Fatty Acid* 15% Cottonseed Oil 1% |
| Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900 E 20% | Fatty Acid* 75% Cottonseed Oil 1% |
| Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900** F 20% | Fatty Acid* 75% Sunoil 6E Plus |
| Mineral Oil 1% Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900** G 60% | Fatty Acid* 35% |
| Cottonseed Oil 1% Atlox 3409F 2% Atlox 3404F 2% Emsorb 6900** | |

*The fatty acid component of Table I comprises a mixture containing about 94% pelargonic acid, 2% capric acid and about 4% caprylic acid. **Tween 80 may be substituted for this emulsifier.

CLPR:

7. The composition of claim 5 wherein the oil is a terpenoid selected from the

group consisting of pine oil, eucalyptus oil, orange oil and cedar oil.

CLPV:

approximately 55 weight percent of an oil component selected from the group consisting of cottonseed oil, pine oil and a paraffinic mineral oil; and

CLPV:

approximately 1.3 to 11.0 weight percent of an oil component selected from the group consisting of cottonseed oil, pine oil and paraffinic mineral oil;

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L6: Entry 7 of 8

File: USPT

Apr 15, 1980

DOCUMENT-IDENTIFIER: US 4198227 A

TITLE: Synergistic herbicidal compositions

BSPR:

For the preparation of emulsifiable concentrates, the components of the compositions can be dissolved in organic solvents, such as benzene, toluene, xylene, methylated naphthalene, corn oil, pine oil, o-dichlorobenzene, isophorone, cyclohexanone, methyl oleate, and the like, or in mixtures of these solvents, together with an emulsifying agent which permits dispersion in water. Suitable emulsifiers include, for example, the ethylene oxide derivatives of alkylphenols or long-chain alcohols, mercaptans, carboxylic acids, and reactive amines and partially esterified polyhydric alcohols. Solvent-soluble sulfates or sulfonates, such as the alkaline earth salts or amine salts of alkylbenzenesulfonates and the fatty alcohol sodium sulfates, having surface-active properties can be used as emulsifiers either alone or in conjunction with an ethylene oxide reaction product. Flowable emulsion concentrates are formulated similarly to the emulsifiable concentrates and include, in addition to the above components, water and a stabilizing agent such as a water-soluble cellulose derivative or a water-soluble salt of a polyacrylic acid. The concentration of the active ingredient in emulsifiable concentrates is usually about 10% to 60% and in flowable emulsion concentrates, this can be as high as about 75%.

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WEST**End of Result Set**☐ **Generate Collection**

L6: Entry 8 of 8

File: USPT

Nov 15, 1977

DOCUMENT-IDENTIFIER: US 4058628 A

TITLE: Disinfectant composition comprising pinanol

BSPR:

The pinanol is dispersed in a fugative carrier for compounding the disinfectant composition of this invention. While the carrier can be an organic solvent, it is preferred to use water as the carrier. The carrier should be fugative preferably at about room temperature leaving no residue or at best an innocuous residue. Also, the carrier should not diminish the disinfectant qualities of the pinanol. Pinanol can be emulsified or dispersed in water conventionally with the aid of an emulsifier, dispersant, surfactant or the like. Preferably, the pinanol is emulsified in water with a soap. For efficiency and economy the soap is derived from terpene chemical operations as is the pinanol. Suitable soaps can be derived from rosin acids, fatty acids and mixtures thereof by their reaction with, for example, alkali metal or alkaline earth metal.

BSPR:

Pinanol also can be used as disinfectant additive to enhance or augment the germicidal activity of other disinfectants such as, for example, pine oil or the like. Pine oil generally contains 50-60% alpha-terpineol with lesser amounts of terpene hydrocarbons, borneol, fenchyl alcohol, related terpineols, terpene ethers, terpene ketones and terpene phenols. The proportion of pinanol in the disinfectant composition (or to be used as an additive) is related to the particular use intended therefor and the particular organisms sought to be eliminated. Typically, as little as about 10% by weight of 2-pinanol can enhance germicidal activity when used as an additive. A pinanol disinfectant composition can contain up to about 80% pinanol by weight or higher depending upon, among other factors, how well the pinanol can be emulsified and stabilized in water.

DEPR:

The phenol coefficient was determined to be 8.0. A commercial pine oil composition also was tested and found to have a phenol coefficient of only 6.5. These results clearly demonstrate the superior germicidal activity of the 2-pinanol disinfectant composition.

DEPR:

The 2-pinanol used in these examples is made by hydrogenating pinane hydroperoxide and is recovered therefrom by conventional distillation techniques. Pinanol bottoms is the fraction of higher boiling constituents remaining from the hydrogenation-distillation operation. The pinanol bottoms contains a large proportion of alpha-terpineol which is the chief component of pine oil. The pinanol bottoms were formulated into a disinfectant composition and the phenol coefficient thereof determined.

DEPR:

A use-dilution of 1:128 was found for the pinanol composition. A commercial pine oil was found to have a 1:112 use-dilution. Economic and time factors restricted further use-dilution tests; however, based on the significant phenol coefficient results reported in Example I, it is believed that a much higher use-dilution number could be displayed by the present pinanol disinfectant composition. These results, though, do demonstrate the superiority of the present pinanol composition over conventional pine oil.

DETL:alpha-terpineol 78.8 2-pinanol 13.8

linalool 1.2 related alcohols 6.2 _____

CLPR:

2. The disinfectant composition of claim 1 wherein said soap is an alkali metal or alkaline earth metal salt of a rosin acid, a fatty acid, or mixtures of said acids.

CLPR:

7. The method of claim 6 wherein said soap is an alkali metal or alkaline earth metal salt of a rosin acid, a fatty acid, or mixtures of said acids.

CCOR:

514/729